

## EAST Search History

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|--|---|------------------|---------|------------------|
| S1    | 2    | US-6400295-\$.DID. OR<br>US-6504498-\$.DID.  | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR               | ON      | 2007/02/12 13:32 |
| S2    | 2    | ("6362762").PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2007/02/12 14:26 |
| S3    | 5    | ((HOMERO) near2 (GUIMARAES)).<br>INV.  | US-PGPUB;<br>USPAT  | OR               | ON      | 2007/02/12 15:01 |
| S4    | 0    | ((HOMERO) near2 (GUIMARAES)).<br>INV.  | EPO; JPO;<br>DERWENT  | OR               | ON      | 2007/02/12 15:02 |
| S5    | 0    | ((HOMERO) near2 (GUIMARAES)).<br>INV.  | USOCR   | OR               | ON      | 2007/02/12 15:02 |
| S6    | 30   | (delta near (modulat\$3 or<br>converter)) and (dc near off\$1set)<br>and (switch\$3 near capacitor) and<br>(charg\$3 with (integrator or (loop<br>near filter)))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/02/13 09:06 |
| S7    | 3193 | (375/319 or 341/143 or 341/150<br>or 341/172).ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/02/12 15:13 |
| S8    | 8    | S6 and S7  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/02/12 15:15 |
| S9    | 15   | ("4107669"   "4115809"  <br>"4301446"   "4399529"  <br>"4588981"   "4851841"  <br>"5030954"   "5363102"  <br>"5541600"   "5703589"  <br>"5745060"   "5757299"  <br>"5892472"   "6037887"  <br>"6040793").PN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR               | ON      | 2007/02/12 15:23 |
| S10   | 30   | ("6040793").URPN.  | USPAT   | OR               | ON      | 2007/02/12 15:27 |
| S11   | 8    | ("4851841"   "5134401"  <br>"5198817"   "5479130"  <br>"5563597"   "5634202"  <br>"5745060"   "5872469").PN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR               | ON      | 2007/02/12 15:51 |

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|     |    |  |   |    |     |                  |
|-----|----|--|---|----|-----|------------------|
| S12 | 1  | (375/319 and 341/143).ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 08:18 |
| S13 | 24 | (delta near (modulat\$3 or<br>converter)) and (dc near off\$1set)<br>and (switch\$3 near capacitor) and<br>(charg\$3 with off\$1set) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 09:55 |
| S14 | 2  | ("20050231411").PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/02/13 09:00 |
| S15 | 7  | ("4893088"   "4894620"  <br>"5391999"   "5479130"  <br>"5914638"   "6288669"  <br>"6469561").PN.                                     | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON  | 2007/02/13 08:35 |
| S16 | 1  | (second near charg\$3) with (dc<br>near off\$1set) with (integrator)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 08:37 |
| S17 | 3  | (second near charg\$3) with<br>(off\$1set) with (integrator)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 08:40 |
| S18 | 9  | (charg\$3) with (dc near off\$1set)<br>with (integrator)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 08:41 |
| S19 | 9  | ("3764908"   "3955138"  <br>"4066960"   "4217546"  <br>"4485343"   "4495463"  <br>"4535287"   "4550295"  <br>"4682102").PN.          | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON  | 2007/02/13 08:50 |

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|     |      |  |   |    |     |                  |
|-----|------|--|---|----|-----|------------------|
| S20 | 2    | (dac near (voltage or signal)) with (charg\$3 with integrator)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 08:52 |
| S21 | 6    | (dac near3 (voltage or signal)) with (charg\$3 with integrator)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 08:52 |
| S22 | 20   | ("4399426"   "4451820"  <br>"4523179"   "4968989"  <br>"5281867"   "5376936"  <br>"5440305"   "5684487"  <br>"5821892"   "5889485"  <br>"5889486"   "6154162"  <br>"6169508"   "6252454"  <br>"6304608"   "6404375"  <br>"6693574"   "6720896"  <br>"6753800"   "6768436").PN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON  | 2007/02/13 09:00 |
| S23 | 181  | (375/319).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/02/13 09:01 |
| S24 | 1110 | (dc near off\$1set) same (charg\$3)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 09:02 |
| S25 | 15   | S23 and S24  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 09:05 |
| S26 | 92   | (delta near (modulat\$3 or<br>converter)) and (dc near off\$1set)<br>and (switch\$3 near capacitor) and<br>(charg\$3)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/13 09:07 |

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|     |       |  |   |    |    |                  |
|-----|-------|--|---|----|----|------------------|
| S27 | 16    | (delta near (modulat\$3 or converter)) and (dc near off\$1set) and (switch\$3 near capacitor) and (charg\$3 with integrator)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/13 09:08 |
| S28 | 0     | ("2005/0238123").URPN.   | USPAT   | OR | ON | 2007/02/13 09:12 |
| S29 | 0     | ("2005/0238123").URPN.   | USPAT   | OR | ON | 2007/02/13 09:13 |
| S30 | 0     | ("2005/0243893").URPN.   | USPAT   | OR | ON | 2007/02/13 09:13 |
| S31 | 10    | ("6204787").URPN.  | USPAT   | OR | ON | 2007/02/13 09:20 |
| S32 | 14    | ("20050275580"   "5072219"  <br>"5392043"   "5563597"  <br>"5703589"   "5818377"  <br>"6037887"   "6204787"  <br>"6323801"   "6509790"  <br>"6570519"   "6842128"  <br>"6900999"   "6927722").PN.            | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2007/02/13 09:24 |
| S33 | 15    | ("4107669"   "4115809"  <br>"4301446"   "4399529"  <br>"4588981"   "4851841"  <br>"5030954"   "5363102"  <br>"5541600"   "5703589"  <br>"5745060"   "5757299"  <br>"5892472"   "6037887"  <br>"6040793").PN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2007/02/13 09:34 |
| S34 | 12    | ((SUMANT) near2<br>(RANGANATHAN)).INV.   | USPAT   | OR | ON | 2007/02/13 09:52 |
| S35 | 5     | ((SUMANT) near2<br>(RANGANATHAN)).INV.   | EPO; JPO;<br>DERWENT  | OR | ON | 2007/02/13 09:53 |
| S36 | 316   | (dc near off\$1set) with (dac)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/13 09:55 |
| S37 | 27908 | (switch\$3 near capacitor)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/13 09:55 |
| S38 | 41    | S36 and S37  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/13 09:56 |

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|     |     |  |   |    |     |                  |
|-----|-----|--|---|----|-----|------------------|
| S39 | 5   | "4,303,888" "4,514,690" "5,975,259"  | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON  | 2007/02/13 10:04 |
| S40 | 2   | ("4896156").PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2007/02/13 10:42 |
| S41 | 0   | ((HOMERO) near2 (GUIMARAES)).<br>INV.  | EPO; JPO;<br>DERWENT  | OR | ON  | 2007/02/13 12:49 |
| S42 | 15  | ("4999634"   "5001725"  <br>"5057839"   "5134401"  <br>"5140325"   "5363102"  <br>"5572107"   "5659314"  <br>"5691720"   "5703589"  <br>"5724038"   "5793811"  <br>"5838270"   "5917440"  <br>"5949360").PN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON  | 2007/02/14 10:45 |
| S43 | 3   | ("6400295").URPN.  | USPAT   | OR | ON  | 2007/02/14 15:59 |
| S44 | 3   | ("5283578"   "6014097"  <br>"6362763").PN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON  | 2007/02/14 16:07 |
| S45 | 640 | (sigma near delta) and ((low near<br>pass) or (aliasing near filter)) and<br>(intermediate near (frequenc\$3 or<br>amplifier))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/14 17:08 |
| S46 | 356 | (sigma near delta) with (output)<br>with ((AAF) or (aliasing near filter)<br>or (low near pass))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/14 16:18 |
| S47 | 189 | (sigma near delta) near5 (output)<br>with ((AAF) or (aliasing near filter)<br>or (low near pass))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/02/14 16:19 |
| S48 | 13  | ("4944025"   "5659891"  <br>"5778022"   "5828705"  <br>"5828955"   "5850598"  <br>"6035186"   "6058147"  <br>"6072992"   "6148045"  <br>"6335952"   "6366622"  <br>"6418158").PN.                            | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON  | 2007/02/14 16:41 |
| S49 | 8   | ("6597748").URPN.  | USPAT   | OR | ON  | 2007/02/14 16:51 |

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|     |      |   |   |    |    |                  |
|-----|------|---|---|----|----|------------------|
| S50 | 44   | ((sigma near delta) same ((low near pass) or (aliasing near filter) or (AAF)) same ((intermediate near (frequenc\$3 or amplifier)) or (IFA)))                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/14 17:29 |
| S51 | 2    | ((sigma near delta) same ((low near pass) or (aliasing near filter) or (AAF)) same ((intermediate near frequenc\$3 near amplifier) or (IFA)))                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/14 17:30 |
| S52 | 1    | ("5003621").PN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2007/02/14 17:22 |
| S53 | 13   | ("4944025"   "5659891"   "5778022"   "5828705"   "5828955"   "5850598"   "6035186"   "6058147"   "6072992"   "6148045"   "6335952"   "6366622"   "6418158").PN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2007/02/14 17:23 |
| S54 | 4613 | ((low near pass) or (aliasing near filter) or (AAF)) same ((intermediate near (frequenc\$3 or amplifier)) or (IFA))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/14 17:29 |
| S55 | 765  | ((low near pass) or (aliasing near filter) or (AAF)) same ((intermediate near frequenc\$3 near amplifier) or (IFA))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/14 17:30 |
| S56 | 258  | ((low near pass) or (aliasing near filter) or (AAF)) with ((intermediate near frequenc\$3 near amplifier) or (IFA))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/14 17:30 |
| S57 | 81   | ((low near pass) or (aliasing near filter) or (AAF)) near5 ((intermediate near frequenc\$3 near amplifier) or (IFA))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/14 17:31 |

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|     |    |  |   |    |    |                  |
|-----|----|--|---|----|----|------------------|
| S58 | 3  | ((low near pass) or (aliasing near filter) or (AAF)) near5<br>((intermediate near frequenc\$3 near amplifier) or (IFA)) and (delta near sigma)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/02/14 17:31 |
| S59 | 17 | ("4847872"   "5757862"  <br>"6160859"   "6218972"  <br>"6225928"   "6243430"  <br>"6317468"   "6339621"  <br>"6590943"   "6683919"  <br>"6696843"   "6819274"  <br>"6850113"   "6864818"  <br>"6917252"   "6930565"  <br>"6976051").PN.  | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2007/02/14 17:32 |
| S60 | 32 | ("3997856"   "4438529"  <br>"4952891"   "5072298"  <br>"5210504"   "5303228"  <br>"5335364"   "5345119"  <br>"5440264"   "5471168"  <br>"5608665"   "5737035"  <br>"5812612"   "5896562"  <br>"5912583"   "5914663"  <br>"5930686"   "5994951"  <br>"5999824"   "6031878"  <br>"6148048"   "6169447"  <br>"6177964"   "6285865"  <br>"6310512"   "6356736"  <br>"6374086"   "6377315"  <br>"6400932"   "6404277"  <br>"6417727"   "6496230").PN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2007/02/14 17:36 |
| S61 | 6  | ("5345409"   "5442353"  <br>"5541600"   "5621345"  <br>"5689440"   "5787125").PN.  | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2007/02/14 17:54 |